

CLAIMS

We claim:

1. A method for provisioning a span for digital services,
5 comprising:
receiving an order for the digital services;
using order data to obtain an assignment of components for the
digital services;
using the order data and the assignment of components to
10 obtain equipment data; and
using the order data, the assignment of components, and the
equipment data to create a span design for the provision of digital
services.
- 15 2. The method of Claim 1, further comprising conducting an
administrative review of the span design.
3. The method of Claim 1, wherein the span design is
created based on a hierarchy of the components.
- 20 4. The method of Claim 3, wherein the hierarchy of the
components comprises: elements, segments, and architectures.
5. The method of Claim 3, wherein the hierarchy of the
25 components comprises: elements, segments with each segment

including one or more of the elements, and/or architectures with each architecture including one or more segments.

6. The method of Claim 1, wherein each component
5 conforms to one or more rules.

7. The method of Claim 2, wherein conducting the administrative review of the span design comprises checking whether each component conforms to one or more rules.

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8. A method for creating a span design for digital services, comprising:

developing templates for use in creating span designs;

receiving an order for digital services; and

5 using order data to select one or more of the templates as a span design for the order.

9. The method of Claim 8, wherein a template comprises a representation of one or more components for provision of the digital
10 services.

10. The method of Claim 8, wherein a template comprises a representation of one or more elements, one or more segments, and/or one or more architectures.
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11. The method of Claim 8, wherein using the order data to select the one or more of the templates as the span design for the order comprises:

20 using the order data to select one or more architecture templates, one or more segment templates, and/or one or more element templates as the span design for the order.

12. The method of Claim 8, wherein using the order data to select the one or more templates as the span design for the order
25 comprises:

using the order data and an assignment of components to select the one or more templates as the span design for the order.

13. The method of Claim 12, wherein using the order data
5 and the assignment of components to select the one or more templates as the span design for the order comprises:

using the order data, the assignment of components, and equipment data to select the one or more templates as the span design for the order.

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14. The method of Claim 9, wherein each component conforms to one or more rules.

15. A system for provision of a span design for digital services, comprising:

a main module for receipt of an order for the digital services;

the main module being operative to provide order data from
5 the order to an assignment control system (ACS);

the ACS being operative to make an assignment of one or more components for the digital services, and to provide the main module with assignment data relating to the assignment;

the main module being operative to provide the assignment
10 data to an inventory module (IM);

the IM being operative to use the assignment data to determine equipment data, and to provide the equipment data to the main module; and

the main module being operative to use the order data, the
15 assignment data, and the equipment data to create the span design for the digital services.

16. The system of Claim 15, wherein the main module is operative to create the span design based on templates.

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17. The system of Claim 16, wherein the templates comprise:

one or more element templates;

one or more segment templates; or

one or more architecture templates.

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18. The system of Claim 16, wherein a template comprises a representation of the one or more components for the digital services.

19. The system of Claim 15, wherein components used for
5 implementation of the digital services are hierarchically organized based on elements, segments, and/or architectures.

20. The system of Claim 19, wherein each of the components comply with one or more rules.

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